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# BULLETIN No. x. Roger Williams Park Museum PROVIDENCE, R. I.

THE AMERICAN OSPREY
BY
HARRY S. HATHAWAY.

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## THE AMERICAN OSPREY

BX

### HARRY S. HATHAWAY.

The Osprey or Fish hawk is one of the most characteristic and conspicuous birds about Narragansett Bay and its shores, and may well be called our best loved bird. Protected by law, as it has been in no other state in the Union, for nearly fifty years, they have found a congenial home here for the rearing of their young and are well protected by the residents on whose estates they may have selected some tree for their nesting site.

"Distinguished as it is from all other diurnal birds of prey by the versatility of the outer toes, which in a state of rest may be carried forward as in the Falcons, but when a fish is captured, the toes are generally thrown backwards so that the prey is secured by the claws ranked in opposite pairs."

The sexes are alike in size and plumage, measuring about two feet in length, and four and one-half feet from tip to tip of wings.

Above, the plumage is dark vandyke brown with more or less white edging on the feathers, which becomes more pronounced as the bird ages.

Head, neck and under parts white with a slight shading of tawny; the crown and a broad stripe that passes from back of either eye to the nape, blackish. Tail dark brown with dusky bars, white tip and shafts.

Its classical name Pandion was given to it by Savigny in 1809 for no obvious reason—simply to distinguish the group from others, while the specific name haliaetus is derived from the Greek, meaning sea-eagle. The subspecific name, carolin-

ensis, was applied in 1870 by Ridgway to distinguish it from the European type.

Its common name, osprey, appears to be a corruption of the word ossifraga or bone breaker (from os, bone, frangere, to break), used as long ago as Pliny's time, and was originally coined for a very different bird, the Lammergever of Southern Europe.

Nearly cosmopolitan in its range, it is found in tropical and temperate America in general, and as far north as Hudson Bay and Alaska, while a single specimen was obtained at Godhaven, Greenland, and it is known to breed beyond the Aretic circle. Within the borders of this state its nesting range is with a few exceptions confined almost wholly to that part of the mainland east of Narragansett Bay extending to the state line and almost wholly in Bristol County. The most northerly situated nest and occupied quite recently is in Barrington, while to the south, two or three nests are found on the Island of Rhode Island near Portsmouth and on Prudence Island. On the western shore of the bay they have never built their nests in the same numbers as on the eastern shore, and there are but three or four nests which I have seen, two on Potowomut Neck, one on Warwick Neck, and several years ago there was one well inland east of Hillsgrove which could be seen from the main road. In the late summer and autumn after the young are able to fly they are often seen inland following the rivers and ponds and also along the south shore.

Béing very punetual in their arrival from the south, they are with the Wild Geese, looked upon as the first harbinger of the breaking up of severe winter, and of settled spring weather. In 1904 the first bird appeared near Bristol on March 26, while this year, 1905, they arrived one day later, March 27. During the first week of April they have all arrived, and at once set about to repair any damage the nest may have received from the winter storms. The return movement to their southern habitat commences in August, and probably their place is taken by birds from breeding places in the more northern states which pass on, or linger as the weather may be favorable or not, as late as October or early November. A large

Plate I shows a set of Osprey taken 20 years ago, in Barrington, by Mr. M.W. Lurner. They are now in the R.W.P. Museum State Collection.

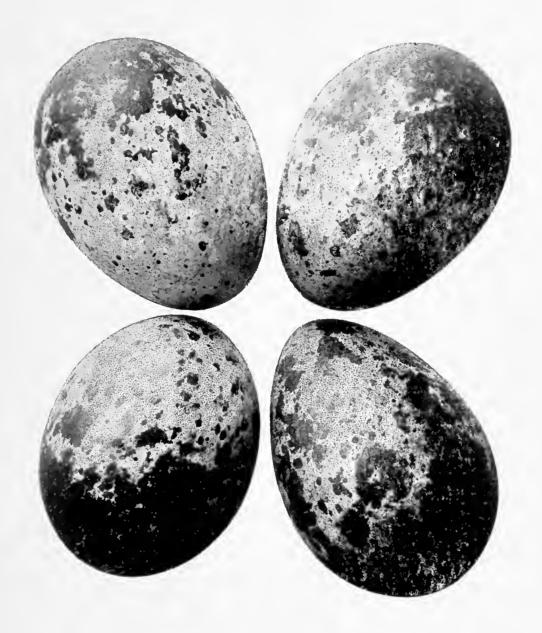


PLATE I
THE AMERICAN OSPREY
(SET OF FOUR EGGS)



majority of the birds which are shot in the fall by hunters are young birds of the year, leaving us to conclude that the adults are the first to depart, while the young follow as they grow stronger and are able to stand the long flight to warmer climes. Their winter home extends to the West Indies and Northern South America, while birds are found resident in the warmer southern states.

The Osprey is one of the most peaceable birds we have, rarely molesting other species, except on provocation, as is well instanced by Mr. Glover Allen in his admirable article on the "Breeding Habits of the Fish Hawk" in the Auk for October, 1892, as follows: "In the swamp near the Fish hawks' nest was a colony of Night Herons, nesting in the smaller trees near the swamp. Almost daily a flock of Crows from Connecticut were accustomed to rob this heronry, covering the ground with the shells of the eggs they had eaten, and occasionally treating a few Fishhawks' nests in the same way. The Fishhawks seemed to unjustly accuse the Herons of the robbery, as the Herons were constantly persecuted by the Hawks. Whenever a Heron appeared he was instantly set upon by one or more of them, and the Heron would seek safety in the thick underbrush where the Hawks could not follow it. Herons were killed, however, almost daily by the Hawks."

The food of the Osprey consists almost exclusively of fish and in this state the abundance of shad, alewives and menhaden, which are found in the bay, and in their spawning season, in the Warren and Kickemuit Rivers, no doubt is accountable for their love of Bristol County as a summer home, for where food is abundant birds will always be found. But it is known to feed on reptiles and batrachians which infest swamps in localities where it has its nest, and there are numerous records of its feeding on black and water snakes.

The fish are captured alive and vary in size and weight, and it has been known to catch them weighing five or six pounds, while there are numerous records of its striking one too large to carry and fly with, and being unable to extricate its talons it has been dragged beneath the water again and again until it was finally drowned.

The Ospreys in this state usually nest in the tops of trees of various kinds, frequently placing them in dead tree-tops,

which command a view of the country for quite a distance and the nests stand out prominently as landmarks. In other localities, as on Plum Island, they are forced by the lack of trees to supply each pair with a site for their home, to build it on the ground and the eggs are sometimes deposited on the bare sand, with a few sticks and bunches of seaweed arranged in a circle, while some of the nests are built up to the height of several feet, regulated by the number of years the nest has been occupied, and the amount of material added to it yearly. Often their nests are placed on large rocks, as on the coast of Maine, and in Long Island Sound. "A large buoy, with a lattice work top, near the west end of Fishers Island, was occupied for many years by a nest of these birds, to the advantage of the fishermen, who were warned in foggy weather of the position of the buoy by the screaming of the Fish Hawks."

Some very remarkable situations are chosen for the location of their nests, other than in the usual places, either a live or dead tree. In the Warren Reservoir, a few years ago, there were two nests built on dead stumps, barely four feet above the water, and the nests could be looked into from a boat. One of the most unique situations that has come to my attention is a nest in Portsmouth, built on an old windmill, which has had the "floats" blown off, and the nest is so placed that, when the rudder turns, the sitting bird, on her nest, swings round and round with every breeze. Another queer site was on the flat tower of a church, where the birds were so noisy during church services that the nest was pulled down. Bristol a pair once located on top of a large house chimney. Frequently they build their nests on the cross arms of the telephone and electric light poles, much to the annovance of the linemen, for in wet weather the presence of sticks lying on the wires often produce a "cross" or "ground," and for this reason they are pulled down. One pair in Bristol was so persistent in "sticking" to the same pole after it had been pulled down that they built it up four times, and it was only after a "ground" had been made by the wet mass in a rain, which set the pole and nest afire, that they deserted it. The pair located in the old tree on the Hartwell place on Warwick Neck, which was cut down to make improvements, relocated its nest

on the electric light converter on a pole beside the road, but, as this was pulled down, they moved along a few poles, and finally found a suitable place on the cross arms. This nest was not disturbed, but I was informed that the birds were so uneasy when any one passed that they did not rear any young that year.

There are several nests in Bristol County built on poles erected by the farmers, with a cart wheel or cross arms placed on top for a platform, and the birds readily take to this special device for their comfort.

The attachment for the same nest and their return to it year after year by the same pair of birds (for it is considered that they mate for life) is a well known fact, and there are several nests which are known to have been occupied for a long period of years. One nest in Bristol County has been annually used for a period extending back to the time of Lafavette's visit to this state about 1780, and was until recently still occupied. Probably the same birds that originally occupied it have long since died, for it is presumed that when one bird dies, the survivor seeks a new mate, so that the pair last using it as a home may be comparatively young birds. A nest in the noted colony on Plum Island has been used for over forty years, and as it is located on the ground, as are most of the nests there, and nesting material annually added, it has been built up by them to a height of over seven feet. Where the nests are blown down, or the tree blown over in severe gales, the birds resort to a nearby tree and build a new nest which is at first quite small as compared with the older nests.

An unusual instance of their love of the same tree I observed at Bristol. A pair for several years had their nests on the horizontal limb of a large elm some four feet in diameter at the base, standing close beside the road. This tree was very old, and while alive and apparently sound from the outside, the interior was decayed, as was shown when it blew over in the terrible gale of November, 1895, breaking off short, about five feet above the ground. The birds upon their return in the spring built a small shallow nest on the top of the broken off stump, but it being so easily accesible I doubt whether they succeeded in rearing any young.

The materials used in nest building consist principally of small dead branches with more or less dry seaweed, and pieces of sod built in, while the cavity, which is barely five inches deep and ten inches in diameter, is lined with a small quantity of seaweed or soft pieces of cedar bark.

The nests vary greatly in size, which depends somewhat upon the length of time they have been occupied. The outside depth varies from a foot and a half to seven feet (as in the one formerly located in the top of a hornbeam forty feet up, on the Kickemuit River) and with an outside diameter of from three to five feet.

The Fish Hawks have a remarkable love for strange objects to decorate their nests with, as is well shown by the following list of articles which I have found upon climbing to them: Corn stalks, pieces of sod, cow dung, sticks, barrel hoops staves and heads, a tent peg, feather duster, rusty tin dipper, leather strap, shingles and small pieces of wood, cork floats, pieces of fish net, small stones and broken shells, an old shoe, bones, very frequently the empty egg cases of the ray or sand-shark, and from under one nest a pair of old overalls was dangling in the breeze.

By May 10 housekeeping duties have commenced in earnest, and full sets of eggs are found in every nest, some having been incubated for a week. Three eggs constitute a complete set usually, while four are the exception, and often two will be all that are laid. Frequently a pair that lays four eggs will do so for three or four years in succession.

The egg laid by this bird is one of the most beautiful specimens found, varying greatly in shape, color and markings, ranging in shape from an "ovate to either a short rounded, elliptical or elongated ovate." "The ground color is usually creamy white, and this is sometimes so evenly and regularly overlaid with pigment as to give it a buffy or vinaceous appearance. Now and then, a specimen is found showing a uniform color throughout, without any indication of blotches. The markings show an equally wide range of variation, both in amount and size. The majority of eggs are heavily blotched and spotted, but generally more thickly about the larger end, and their markings include nearly all the different shades of

brown and vinaceous red." No two eggs in a set are exactly alike in coloration, and usually in a set of three, two will be darker than the third. The eggs in a large series average in size 2.40 x 1.75. I think the period of incubation is twenty-one days, but there appears to be a lack of absolute information, and I can find no positive record of the actual time, some claiming that twenty-eight days is necessary to hatch the young.

"The newly hatched young or nestling has a close, dense covering of short down; the color of this down is mostly sooty or even black, but on the head and sides of neck is relieved by grayish tufts, and along the back from nape to tail by a wide whitish stripe; tufts of a grayish color also diversify the back, while the abdomen is of a dirty white hue and the thighs are immaculate white on their inner surface."

But a single brood is raised in a season, and when the eggs have been taken from the nest they soon lay another set. Often the English Sparrows build their nest in the interstices of the Fish Hawks', and on Plum Island the Purple Grackle also place their nests in like situations. In a cavity of a tree in which an osprey had a nest a pair of Tree Swallows had taken up their abode, and at the time of my visit they had laid five eggs. Upon the approach of a person near the nest the bird, which is sitting, will rise up and utter a shrill whistle, and upon nearer approach, it flies off uttering its shrill cries which soon bring the male, and if one climbs to the nest, they circle overhead, occasionally making a dive at the intruder and coming within a few feet, but checking their course and sweeping by overhead "their wings making a loud whizzing in the air." Personally I have never known one to attack a person when at the nest, but they approach close enough to make one feel uneasy, especially if you are at a nest fifty feet above ground.

Judge John Clark of Saybrook, Conn., is quoted in Bendire's "Life Histories of North American Birds," as follows: "One curious fact in reference to the Osprey I noticed here on two occasions, was the building of nests late in the summer, either for next year's occupancy or for resting in during the season, long after breeding time was over. One such nest was used the next spring; in the other case the bird was shot."

The belief is common among farmers of this state, upon whose property the Osprey's rear their young, that they are of benefit in keeping away other hawks, which are wont to steal a chicken now and then. However this may be, they are surely as good as a watch dog in giving warning of a person coming near, for they will give a shrill whistle upon their approach within a short distance of the nest, and this is one of the reasons for the rigid protection given them.

The Osprey's manner of flight is characteristic and never was better description written than that by Alexander Wilson, which I quote: "The flight of the Fishhawk, his maneuvers while in search of fish, and his manner in seizing his prey, are deserving of particular notice. In leaving the nest, he usually flies direct till he comes to the sea, then sails around, in easy curving lines, turning sometimes in the air as on a pivot, apparently without the least exertion, rarely moving the wings, his legs extended in a straight line behind, and his remarkable length, and curvature or bend of wings, distinguishing him from all other Hawks. The height at which he thus elegantly glides is various, from one hundred and fifty to two hundred feet, sometimes much higher, all the while calmly reconnoitering the face of the deep below. Suddenly he is seen to check his course, as if struck by a particular object which he seems to survey for a few moments with such steadiness, that he appears fixed in air, flapping his wings. This object, however, he abandons, or rather the fish he had his eye on has disappeared, and he is again seen sailing around as before. Now his attention is again arrested, and he deseends with great rapidity; but ere he reaches the surface, shoots off on another course, as if ashamed that a second victim had escaped him. Now he sails at a short height above the surface, and by a zigzag descent, and without seeming to dip his feet in the water, seizes a fish, which, after carrying a short distance, he probably drops or yields up to the Bald Eagle, and again aseends, by easy spiral eircles, to the higher regions of the air, where he glides about in all the ease and majesty of his species. At onee from this sublime aerial height, he deseends like a perpendicular torrent, plunging into the sea with a loud rushing sound, and with the certainty of a rifle. In a few moments he emerges, bearing in his claws his struggling prey, which he always carries head foremost, and, having risen a few feet above the surface, shakes himself as a spaniel would do, and directs his heavy and laborious course directly for the land."



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